## **PATENT COOPERATION TREATY**

From the INTERNATIONAL SEARCHING AUTHORITY

Applicant

TEMREL INC.

PCT

23.400

To: NOTIFICATION OF TRANSMITTAL OF BECK GREENER THE INTERNATIONAL SEARCH REPORT AND THE WRITTEN OPINION OF THE INTERNATIONAL Fulwood House SEARCHING AUTHORITY, OR THE DECLARATION Attn. Burford, Anthony F. 12 Fulwood Place London WC1V 6HR UNITED KINGDOM (PCT Rule 44.1) ate of mailing day/month/year) 06/04/2005 Applicant's or agent's file reference FOR FURTHER ACTION See paragraphs 1 and 4 below AFB/JAS/P10257WO International filing date International application No. (day/month/year) 15/12/2004 PCT/GB2004/005263

1.	x	The applicant is hereby notified that the international search report and the written opinion of the International Searching Authority have been established and are transmitted herewith.
		Filing of amendments and statement under Article 19: The applicant is entitled, if he so wishes, to amend the claims of the International Application (see Rule 46): When? The time limit for filing such amendments is normally 2 months from the date of transmittal of the
		International Search Report; however, for more details, see the notes on the accompanying sheet.
		Where? Directly to the International Bureau of WIPO, 34 chemin des Colombettes 1211 Geneva 20, Switzerland, Fascimile No.: (41–22) 740.14.35
		For more detailed instructions, see the notes on the accompanying sheet.
2.		The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect and the written opinion of the International Searching Authority are transmitted herewith.
3.		With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:
		the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.  no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.
4.		ninders
	Inter	rtly after the expiration of <b>18 months</b> from the priority date, the International application will be published by the mational Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international lication, or of the priority claim, must reach the International Bureau as provided in Rules 90 <i>bis</i> .1 and 90 <i>bis</i> .3, respectively, ore the completion of the technical preparations for international publication.
	Inte	applicant may submit comments on an informal basis on the written opinion of the International Searching Authority to the rnational Bureau. The International Bureau will send a copy of such comments to all designated Offices unless an rnational preliminary examination report has been or is to be established. These comments would also be made available to publish that he there the expristion of 30 months from the priority date.

Name and mailing address of the International Searching Authority	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Eva Bohácová

Within 19 months from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later); otherwise, the applicant must, within 20 months from the priority date, perform the prescribed acts for entry into the national phase before those designated Offices.

In respect of other designated Offices, the time limit of 30 months (or later) will apply even if no demand is filed within 19

See the Annex to Form PCT/IB/301 and, for details about the applicable time limits, Office by Office, see the PCT Applicant's

Guide, Volume II, National Chapters and the WIPO Internet site.

## NOTES TO FORM PCT/ISA/220

These Notes are intended to give the basic instructions concerning the filing of amendments under article 19. The Notes are based on the requirements of the Patent Cooperation Treaty, the Regulations and the Administrative Instructions under that Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the PCT Applicant's Guide, a publication of WIPO.

In these Notes, "Article", "Rule", and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions respectively.

## INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19

The applicant has, after having received the international search report, one opportunity to amend the claims of the international application. It should however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international preliminary examination procedure, there is usually need to file amendments of the claims under Article 19 except where, e.g. the applicant wants the latter to be published for the purposes of provisional protection or has another reason for amending the claims before international publication. Furthermore, it should be emphasized that provisional protection is available in some States only.

#### What parts of the international application may be amended?

Under Article 19, only the claims may be amended.

During the international phase, the claims may also be amended (or further amended) under Article 34 before the International Preliminary Examining Authority. The description and drawings may only be amended under Article 34 before the International Examining Authority.

Upon entry into the national phase, all parts of the international application may be amended under Article 28 or, where applicable, Article 41.

#### When?

Within 2 months from the date of transmittal of the international search report or 16 months from the priority date, whichever time limit expires later. It should be noted, however, that the amendments will be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

### Where not to file the amendments?

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rule 46.2).

Where a demand for international preliminary examination has been its filed, see below.

#### How?

Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed.

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Administrative Instructions, Section 205(b)).

The amendments must be made in the language in which the international application is to be published.

#### What documents must/may accompany the amendments?

## Letter (Section 205(b)):

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confused with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

The letter must be in English or French, at the choice of the applicant. However, if the language of the international application is English, the letter must be in English; if the language of the international application is French, the letter must be in French.

## NOTES TO FORM PCT/ISA/220 (continued)

The letter must indicate the differences between the claims as filed and the claims as amended. It must, in particular, indicate, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether

- (i) the claim is unchanged;
- (ii) the claim is cancelled;
- (iii) the claim is new;
- (iv) the claim replaces one or more claims as filed;
- (v) the claim is the result of the division of a claim as filed.

## The following examples (flustrate the manner in which amendments must be explained in the accompanying letter:

- (Where originally there were 48 claims and after amendment of some claims there are 51):
   \*Claims 1 to 29, 31, 32, 34, 35, 37 to 48 replaced by amended claims bearing the same numbers; claims 30, 33 and 36 unchanged; new claims 49 to 51 added.\*
- [Where originally there were 15 claims and after amendment of all claims there are 11]:
   "Claims 1 to 15 replaced by amended claims 1 to 11."
- [Where originally there were 14 claims and the amendments consist in cancelling some claims and in adding new claims]:
   "Claims 1 to 6 and 14 unchanged; claims 7 to 13 cancelled; new claims 15, 16 and 17 added." or "Claims 7 to 13 cancelled; new claims 15, 16 and 17 added; all other claims unchanged."
- 4. [Where various kinds of amendments are made]: "Claims 1-10 unchanged; claims 11 to 13, 18 and 19 cancelled; claims 14, 15 and 16 replaced by amended claims 14; claim 17 subdivided into amended claims 15, 16 and 17; new claims 20 and 21 added."

## "Statement under article 19(1)" (Rule 48.4)

The amendments may be accompanied by a statement explaining the amendments and indicating any impact that such amendments might have on the description and the drawings (which cannot be amended under Article 19(1)).

The statement will be published with the international application and the amended claims.

## It must be in the language in which the international appplication is to be published.

It must be brief, not exceeding 500 words if in English or if translated into English.

It should not be confused with and does not replace the letter indicating the differences between the claims as filed and as amended, it must be filed on a separate sheet and must be identified as such by a heading, preferably by using the words "Statement under Article 19(1)."

It may not contain any disparaging comments on the international search report or the relevance of citations contained in that report. Reference to citations, relevant to a given claim, contained in the international search report may be made only in connection with an amendment of that claim.

#### Consequence if a demand for international preliminary examination has already been filed

If, at the time of filing any amendments under Article 19, a demand for international preliminary examination has already been submitted, the applicant must preferably, at the same time of filing the amendments with the International Bureau, also file a copy of such amendments with the International Preliminary Examining Authority (see Rule 62.2(a), first sentence).

## Consequence with regard to translation of the international application for entry into the national phase

The applicant's attention is drawn to the fact that, where upon entry into the national phase, a translation of the claims as amended under Article 19 may have to be furnished to the designated/elected Offices, instead of, or in addition to, the translation of the claims as filed.

For further details on the requirements of each designated/elected Office, see Volume II of the PCT Applicant's Guide.

## PATENT COOPERATION TREATY

## **PCT**

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER  ACTION  as well	see Form PCT/ISA/220 I as, where applicable, item 5 below.
AFB/JAS/P10257WO	International filing date (day/month/year)	(Earliest) Priority Date (day/month/year)
International application No.	international litting date (day/montrayear)	(22,000)
PCT/GB2004/005263	15/12/2004	23/12/2003
Applicant		
TEMREL INC.		
This International Search Report has be according to Article 18. A copy is being	een prepared by this International Searching Aut transmitted to the International Bureau.	hority and is transmitted to the applicant
	sts of a total of sheets.  by a copy of each prior art document cited in this	s report.
Basis of the report     a. With regard to the language, the language in which it was filed, the language in which it was filed.	ne international search was carried out on the ba unless otherwise Indicated under this item.	sis of the International application in the
The internation this Authority (	nal search was carried out on the basis of a trans Rule 23.1(b)).	station of the international application furnished
b. With regard to any nuc	eleotide and/or amino acid sequence disclosed	d in the international application, see Box No. I.
2. Certain claims were f	ound unsearchable (See Box II).	
3. Unity of invention is	lacking (see Box III).	
4. With regard to the title,	and mined by the applicant	
L	submitted by the applicant.	
the state of the s	blished by this Authority to read as follows: G PELLETS FOR PHARMACEUTICAL	COMPOSITIONS
5. With regard to the abstract,		
	s submitted by the applicant.	
the text has been esta may, within one month	blished, according to Rule 38.2(b), by this Authon the date of mailing of this international sea	rity as it appears in Box No. IV. The applicant arch report, submit comments to this Authority.
6. With regard to the drawings,	Alleled with the ghotenet in Figure \$15	
_	be published with the abstract is Figure No	
	by the applicant.	uggoet a figure
<u></u>	y this Authority, because the applicant failed to s	
	y this Authority, because this figure better characters.	denzes die hiveridon.
b. X none of the figures is	to be published with the abstract.	

## INTERNATIONAL SEARCH REPORT

ir ational Application No PCT/GB2004/005263

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 A61K9/16 A61K31/573 A61K31/4164 A61K38/22

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

 $\label{localization} \begin{array}{ll} \mbox{Minimum documentation searched (classification system followed by classification symbols)} \\ \mbox{IPC 7} & \mbox{A61K} \end{array}$ 

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, MEDLINE, EMBASE, BIOSIS

C. DOCUMENTS CONSIDERED TO BE RELEVANT					
Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.				
US 5 834 021 A (SPEIRS ET AL) 10 November 1998 (1998-11-10) cited in the application	1,4, 8-10, 13-16, 18-32, 35,36, 38,39				
column 3, line 37 - line 39 column 4, line 8 - line 10 example 1 claims 1,5	1-39				
US 2001/004458 A1 (OPITZ MICHAELA ET AL) 21 June 2001 (2001-06-21)	1,4,7, 24-29, 35,36,39				
paragraph '0015! paragraph '0020! example 1	1-39				
	US 5 834 021 A (SPEIRS ET AL) 10 November 1998 (1998-11-10) cited in the application  column 3, line 37 - line 39 column 4, line 8 - line 10 example 1 claims 1,5  US 2001/004458 A1 (OPITZ MICHAELA ET AL) 21 June 2001 (2001-06-21)  paragraph '0015! paragraph '0020! example 1				

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X Further documents are listed in the continuation of box C.	Patent family members are listed in annex.			
Special categories of cited documents:  'A' document defining the general state of the art which is not considered to be of particular relevance  'E' earlier document but published on or after the international filing date  'L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  'O' document referring to an oral disclosure, use, exhibition or other means  'P' document published prior to the international filing date but later than the priority date claimed	<ul> <li>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</li> <li>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</li> <li>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</li> <li>"&amp;" document member of the same patent family</li> </ul>			
Oate of the actual completion of the international search	Date of mailing of the international search report			
23 March 2005	06/04/2005			
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk	Authorized officer			
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Sindel, U			

## INTERNATIONAL SEARCH REPORT

national Application No
PCT/GB2004/005263

Category °	citation) DOCUMENTS CONSIDERED TO BE RELEVANT  Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
4	US 2003/018000 A1 (KERRISH DONALD J ET AL) 23 January 2003 (2003-01-23) table 4	1-39

## INTERNATIONAL SEARCH REPORT

Information on patent family members

national Application No
PCT/GB2004/005263

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
US 5834021	A	10-11-1998	GB	2292079	A	14-02-1996
00 000 1021	••		CA	2229283	A1	22-02-1996
			DE	69519577	D1	11-01-2001
			DE	69519577	T2	09-08-2001
			DK	772443	T3	19-02-2001
			ΕP	0772443	A1	14-05-1997
			WO	9604918		22-02-1996
US 2001004458	A1	21-06-2001	DE	19637082	A1	19-03-1998
00 200200			AT	228830	Ţ	15-12-2002
			AU	730673	B2	08-03-2001
			AU	4553997	Α	02-04-1998
			BR	9713199	A	04-04-2000
			CA	2265766	A1	19-03-1998
			CN	1237104	A ,C	01-12-1999
			DΕ	59708898	D1	16-01-2003
			DK	925060	T3	07-04-2003
			WO	9810754	A1	19-03-1998
			EP	0925060	A1	30-06-1999
			ES	2187822	T3	16-06-2003
			JP	2001513752	T	04-09-2001
			KR	2000036013	Α	26-06-2000
			PT	925060	T	30-04-2003
			TR	9901147	T2	21-07-1999
			TW	508250	В	01-11-2002
			US	6224909	B1	01-05-2001
			ZA	9708171	A	11-03-1999
US 2003018000	A1	23-01-2003	WO	02074317	A1	26-09-2002

## PATENT COOPERATION TRE TY

INTERNATIONAL SEARCHING AUTHORITY To: WRITTEN OPINION OF THE see form PCT/ISA/220 INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1) Date of mailing (day/month/year) see form PCT/ISA/210 (second sheet) Applicant's or agent's file reference FOR FURTHER ACTION see form PCT/ISA/220 See paragraph 2 below International application No. International filing date (day/month/year) Priority date (day/month/year) 23.12.2003 PCT/GB2004/005263 15.12.2004 International Patent Classification (IPC) or both national classification and IPC A61K9/16, A61K31/573, A61K31/4164, A61K38/22 Applicant TEMREL INC. This opinion contains indications relating to the following items: 1. Box No. 1 Basis of the opinion Box No. II Priority ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability ☐ Box No. IV Lack of unity of invention Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement ☐ Box No. VI Certain documents cited ☐ Box No. VII Certain defects in the international application Box No. VIII Certain observations on the international application **FURTHER ACTION** 2. If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notifed the International Bureau under Rule 66.1 bis(b) that written opinions of this International Searching Authority will not be so considered. If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later. For further options, see Form PCT/ISA/220. For further details, see notes to Form PCT/ISA/220. Name and mailing address of the ISA:

European Patent Office D-80298 Munich

Tel. +49 89 2399 - 0 Tx: 523656 epmu d

Fax: +49 89 2399 - 4465

**Authorized Officer** 

Telephone No. +49 89 2399-



# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

4. Additional comments:

International application No. PCT/GB2004/005263

	Box N	o.1 Basis of the opinion			
1.	With regard to the <b>language</b> , this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.				
	la	nis opinion has been established on the basis of a translation from the original language into the followinguage , which is the language of a translation furnished for the purposes of international search nder Rules 12.3 and 23.1(b)).			
2.	. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:				
	a. type	e of material:			
		a sequence listing			
		table(s) related to the sequence listing			
	b. forn	nat of material:			
		in written format			
		in computer readable form			
	c. time	e of filing/furnishing:			
		contained in the international application as filed.			
		filed together with the international application in computer readable form.			
		furnished subsequently to this Authority for the purposes of search.			
3.	h: Co	addition, in the case that more than one version or copy of a sequence listing and/or table relating there as been filed or furnished, the required statements that the information in the subsequent or additional opies is identical to that in the application as filed or does not go beyond the application as filed, as oppropriate, were furnished.			

Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Yes: Claims

5-6, 11-12, 17, 33-34, 37-38

No: Claims

1-4, 7-10, 13-16, 18-32, 35-36, 39

Inventive step (IS)

Yes: Claims

No: Claims

1-39

Industrial applicability (IA)

Yes: Claims No: Claims 1-39

see separate sheet

2. Citations and explanations

Reference is made to the following documents:

D1: US-A-5 834 021 (SPEIRS ET AL) 10 November 1998

D2: US 2001/004458 A1 (OPITZ MICHAELA ET AL) 21 June 2001

## Item V

## 1 Novelty

The subject matter of claims 1-4, 7-10, 13-16, 18-32, 35-36 and 39 is not regarded as new in the sense of Article 33(2) PCT.

D1 already discloses a process for the manufacture of particles with a certain size comprising the steps of mixing water with the dry powder mixture to form a paste, extruding the paste, spheronizing the extrudate and drying the spheronized particles which have a diameter in the range of 1000 to 1400  $\mu$ m (see example 1). The dry powder mixture comprises the active prednisolone metasulphobenzoate, up to 20% of croscarmellose sodium, up to 50% of lactose and e.g. 40% of microcrystalline cellulose (see column 4, lines 7-10 and example 1).

D2 describes a process for the manufacture of carvedilol pellets consisting of the same process steps as mentioned in D1 (see example 1). The highest amount of water added for the granulation step is equal to 81.8% of the powder mixture (see example 5). 90% of the resulting pellets have a diameter in the range of 600 to 1200  $\mu$ m (see paragraph [0029]).

Hence, the subject matter of present claims 1-4, 7-10, 13-16, 18-32, 35-36 and 39 is not new.

## 2 Inventive step

The subject matter of claim 1-39 does not involve an inventive step in the sense of Article 33(3) PCT.

The problem to be solved in the present application is the provision of an alternative process for the manufacture of pellets with a certain range of size.

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (SEPARATE SHEET)

International application No

PCT/GB2004/005260

The solution provided is the use of water in an amount of 180-190% of the component composition.

Closest prior art is D1 describing the same process with identical ingredients except mentioning the concrete amount of water used for the granulation. Since the resulting particles have the same size as the ones of the present application, the Examining Division is not able to appreciate the presence of an inventive step.

Therefore, the Applicant is kindly requested to submit data showing that the present dosage form has superior properties when compared to the prior art.

3 Industrial applicability

The subject matter of claims 1-39 is industrially applicable in the sense of Article 33(4) PCT.